Proposed New Model

The core of the proposed new model is derived from four non-fee grazing costs identified within three cow-calf beef livestock enterprise budgets published by the University of Idaho's College of Agricultural and Life Sciences in 2020 (Attachment I). The sums of each of the non-fee costs identified within the budgets were averaged, then prorated using data from the 2014 University of Idaho research bulletin Idaho Private Rangeland Grazing – Lease Arrangements to reflect non-fee costs under private leases likely borne by lessees (Attachment J, Table 10). The model also includes two non-fee grazing costs published in the 1992 University of Oregon Extension Service special report Costs Incurred by Permittees in Grazing Cattle on Public and Private Rangelands and Pastures in Eastern Oregon that were adjusted for inflation (Attachment K).

Model Rate as a Percentage of the Private Rate

The proposed new model nets the prorated sum of the non-fee grazing costs paid by lessees identified in the University of Idaho enterprise budgets and the non-fee costs identified in the University of Oregon Extension Service report (adjusted for inflation) against the prior-year USDA NASS private rate for Idaho, then divides this amount by the private rate to express the Idaho endowment grazing rate as a percentage of the USDA NASS private rate for Idaho. For purposes of simplicity, this percentage is rounded to the nearest one percent.

Calculating the Model Rate

Variables

A = NASS Idaho Private Rate (as published two years prior)

B = Sum of the Average Non-Fee Costs for Salt, Trucking, Labor and Repair (from 2020 UI Cattle Budgets)

C = % of Non-Fee Services Provided by Private Lessees (from budgets UI private lease arrangements study)

D = Sum of Non-Fee Costs for Lost Animals and Water (from 1992 OSU Extension study)

Formula

 $(A - (B \times C) - D) \div A =$ Endowment Rate as % of Private Rate

 $(\$18.50 - \$5.21 - \$2.47) \div \$18.50 = 58.49\%$

 $10.82 \div 18.50 = 58.49\%$

Endowment Percentage Rate = 58% of the USDA NASS private Rate for Idaho (58.49% rounded to the nearest percent)

USDA NASS Private Rate for Idaho x Endowment Percentage Rate = Idaho Endowment AUM Rate

18.50 x 58% = 10.73/AUM

Non-Fee Grazing Costs from UI Cattle Budgets

Non-Fee Services Lessor Provides	UI Cattle Budget EBB- CC1-20	UI Cattle Budget EBB- CC7-20	UI Cattle Budget EBB- CC8-20	Average Non-Fee Costs	
Salt/Mineral	\$0.50	\$0.54	\$0.37	\$0.47	
Trucking to & from Pasture	\$1.50	\$0.75	\$0.83	\$1.03	
Hired Labor	\$7.35	\$2.80	\$3.65	\$4.60	
Buildings & Improvements (Repair)	\$0.90	\$1.07	\$0.90	\$0.96	

Prorated Non-Fee Grazing Costs

Non-Fee Grazing Services	Avg. \$/AUM for Non-Fee Services		% of Non-Fee Services Paid by Lessee		Value of Non-Fee Services Provided by Lessee
Salt/Minerals	\$0.47	x	84.4%	=	\$0.40
Trucking to & from Pasture	\$1.03	x	79.4%	=	\$0.82
Hired Labor	\$4.60	х	79.4%	=	\$3.65
Buildings & Improvements (Repair)	\$0.96	х	35.2%	=	\$0.34
Total					\$5.21

Non-Fee Grazing Costs from 1990 OSU Extension Study

Operation	Federal Grazing Permits, 1992	Private Leases, 1992	Difference, 1992	Adjusted for Inflation, 2021 \$ ***	
Lost Animals*	\$2.81	\$1.58	\$1.23	\$2.33	
Water (Production Item)**	\$.27	\$.20	\$.07	\$.14	
Total				\$2.47	

Data from Costs Incurred by Permittees in Grazing Cattle on Public and Private Rangelands and Pastures in Eastern Oregon, Obermiller, July 1992

- * Data from page 13, Table 5
- ** Data from Page 7, Table 2
- *** Inflation adjustments calculated using U.S. Bureau of Labor Statistics online calculator at https://www.bls.gov/data/inflation_calculator.htm

Rate Change Impacts

The current 2021 endowment grazing rate of \$7.07/AUM is 38.2% of the USDA NASS private rate for Idaho. The model output rate for 2022 is 58% of the USDA NASS private rate for Idaho, or \$10.73/AUM. This change represents a 51.8% increase in grazing rates from 2021 to 2022.

The Department manages 1,107 endowment grazing leases, which range from 1 AUM to 25,253 AUMs, with an average count of 232 AUMs. The largest endowment grazing lease encompasses 25,253 AUMs, while the median lease contains 86 AUMs (Attachment L).

	AUMs	Current Annual Rate	@ 58% of Private Rate	Net Change	% Change
Total	256703	\$1,814,890.21	\$2,754,423.19	\$939,532.98	51.8%
Average	232	\$1,639.47	\$2,488.19	\$848.72	
Median	86	\$608.02	\$922.78	\$314.76	
Maximum	25253	\$178,538.71	\$270,964.69	\$92,425.98	